

角 蝉 科 一 新 属 一 新 种

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角蝉科的昆虫,是世界著名的富于拟态性的昆虫。它們的畸形发达的前胸背板給人們以明显的識別的特征。这一科不少种类是果树、森林或农业的重要害虫,造成相当严重的災害。角蝉科截至目前为止,全世界已記載的共 324 属 2500 余种;中国已知的 20 属 152 种。

本文記述角蝉科一新属及一新种。

犀角蝉属 *Jingkara* (新属)

(图版 I)

中型的昆虫。身体背面有粗的点刻及細毛。

头的前面观(1)近长方形,寬过于高。顏面突出成平板状(2—3),端部略呈三瓣状,唇基向下方突出。眼大,卵形而凸出。单眼小,单眼間的距离較单眼与复眼的距离为大,位置比复眼低(1)。触角(4)第一、二节短,近圓球形;第三节长,基部膨大成結状,端部鬃毛状;第二、三节上有横紋及毛。喙到达后足基节的中間。

前胸背板前面向上突起成一闊而側扁的直立的前角(5—7, ah),微微傾向前方,其后緣有齿,前角的末端分成二子叶状的瓣(b),指向后方;前胸斜面(m)圓錐形;肩角(h)鈍;后突起(pp)隆起,盖片状,紧貼于复翅上,背緣有齿,基部向背面作波状弯曲,頂端尖銳,到达复翅肛角,并有一大而近圓形側扁的亚端結(n)。小盾片可見。

复翅(8)狹长,端緣截形,半透明,基部及前緣区較厚,有点刻而多毛,脉紋明显,脉相近端部不太規則;頂角略尖;端边域(lm)闊。后翅(9)狹,有四亚端室。足(10)簡單,第三跗节最长。

模式种 *Jingkara hyalipunctata* Chou

此属极接近 *Hypsauchenia* Germar 及 *Pyrgauchenia* Breddin 两属。其区别的特征为前胸背板前角扁而闊,不向身体后方弯曲,端瓣呈子叶状,前角的后緣与背突起的背緣有齿。也相似于 *Hypsolyrium* Schmidt 及 *Pyrgonota* Stål 二属,但从前角末端的分瓣情形与后突起亚端結的存在可以区分。

犀角蝉 *Jingkara hyalipunctata* 新种

(图版 I—II)

中型的种。身体(II, 1)背面黃褐色至黑褐色,多刻点及白色或黃白色的毛,在前胸背

板本身的两側特別浓密。腹面黑色。复翅褐色,有透明的斑点。

顏面黑色,邊緣褐色;从前面观橫寬,寬度为高度的 2 倍(I, 1)。眼黑色。单眼間的距离約为单眼与复眼間距离的 2 倍,位置在复眼下緣的水平綫下。

前胸背板褐色或黑褐色,局部区域黃褐色,脊起和齿黑色;前胸斜面(I, 5)圓錐形,高度約等于基部的寬度;前角前面观狹,有一明显的中縱脊綫及几条不規則的橫脊綫,从側面观高略过于寬,前緣弓形弯曲,后緣几平直,有不規則的齿;二端瓣呈子叶状,略平而向內側傾斜;后突起的亚端結大而扁,圓形,有网状雕刻紋,背緣的齿不規則,各个体的数目也多变化。

复翅褐色,端区和后緣区有不規則分布的大小不同的透明的窗点,近肛角的几个特別明显。后翅完全透明。足褐色,腿节的背面及爪帶黑色。

腹部各节黑色,后緣及側緣褐色。雄性的外生殖器如图 II, 2—3;阳基側突(pm)透明,末端呈矛状;阳茎(ae)纤细,末端作 S 状弯曲。雌性的产卵器如图 II, 4, 产卵瓣寬闊,第一、二对瓣(v_1 , v_2)較尖,第三对瓣(v_3)鈍。

体长从头的前面到复翅末端为 5.8—6.0 毫米。两肩角間的寬度約 1.8 毫米。从前胸腹板的底面到前角頂端的高度 3.5—4 毫米。

模式标本 正模 1♂ 配模 1♀ 副模雌雄共 162 头。1937 年 7 月采自陝西省太白山。(标本保存在著者的收藏及西北农学院昆虫教研組标本室)

被害植物 櫟树。

末龄若虫 (II, 5—8) 特征 头黑色,寬过于高。眼褐色。前胸背板黑色,邊緣黃褐色;前胸斜面(7)三角形,中脊綫黃褐色;沒有前角;后突起短,只到达后胸后緣,有黑色大而圓形的亚端結,頂尖三角形而黑色(6)。中胸、后胸及翅芽黑色,邊緣黃褐色。足褐色,腹部各节背板除后緣及側緣褐色外均为黑色;第七、第八两节各有一对尾状突起(5, 6, 8),长而多毛,末端尖銳,黃褐色,伸向身体的兩側。体长 3.5—4 毫米。

同时同地采得标本 266 头。

末前一龄若虫 形状和顏色与末龄若虫相似,但后突起极短,沒有亚端結。体长 2 毫米。

同时同地采得标本 18 头。

初龄若虫 酷似前述,但翅芽及前胸背后突起刚刚显出。体长 1.5 毫米。同时同地采得标本 4 头。

A NEW GENUS AND A NEW SPECIES OF MEMBRACIDAE (HOMOPTERA: AUCHENORRHYNCHA)

CHOU IO

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Genus *Jingkara* (Gen. nov.)

(Plate I)

Medium-sized insects, roughly punctate and pubescent on dorsal surface.

Head subquadrate in frontal view, broader than high. Face elevated as a vertical plate, the apex more or less trilobed; clypeus long, produced downward. Eyes large, ovate and protruding. Ocelli small, much farther apart from each other than from the eyes and situated under the eyes. Rostrum reaching to the hind coxae. The first and second segments of antennae short, globular, third segment very long, with node at base, the second and third with striae and setae.

Pronotum elevated into a high erect anterior horn, which is flattened laterally and is wider and slightly leaning forward, serrate or dentate on posterior margin, the tip bifurcated into two cotyledon-formed lobes directed backward. Metopium conical, humeral angles large and blunt. Posterior process heaving, tectiform, impinging on tegmina, serrate or dentate on dorsal margin, slightly sinuate at base, and bearing a large, rounded, laterally flattened subapical node, tip sharp and extending just about to the anal angle of the tegmina. Scutellum visible.

Tegmina long, narrow, truncate, semiopaque; basal and costal area broadly coriaceous and punctate; veins distinct, venation irregular in the apical region; tip pointed; apical limbus broad. Wing narrow, with four apical cells. Legs simple, third tarsi longest.

Type-species: *Jingkara hyalipunctata* Chou (sp. nov.)

This genus is closely related to *Hypsauchenia* Germar and *Pyrgauchenia* Breddin. Its distinguishing characters are: anterior horn flattened laterally and broad, not curved backward, cotyledon-form lobes at the tip, posterior margin of anterior horn and dorsal margin of posterior process serrate or dentate. It also resembles genera *Hypsolyrium* Schmidt and *Pyrgonota* Stål, but may be separated by bifurcated cotyledon-form lobes of anterior horn and presence of the subapical node of posterior process.

Jingkara hyalipunctata (sp. nov.)

(Plate I-II)

Medium-sized species. Flattened laterally. Brown or yellow-brown on dorsal surface, punctate and with white-yellowish minute hairs, denser on the pronotum proper. Black on ventral surface. Hyaline spots on tegmina.

Face black, its margin brown. Eyes black. The distance between the ocelli is two times that between them and the eyes; ocelli situated below the horizontal line under the eyes.

Pronotum brown, partially yellowish-brown, black on the carines and dentes. Meto-

pium conical. Anterior horn in frontal view narrow, with a prominent longitudinal median carine and some irregular transverse ridges; in lateral view a little higher than wide, with anterior margin curved and posterior margin straight and with dentes irregular and variable in different specimens; bifurcated at the tip in colyledon-formed lobes, horizontal and inclined inwards; subapical node of posterior process large and flat, round, with net-like sculptures; the dentes on dorsal margin also variable in different specimens.

Tegmina brown, yellowish-brown on outer margin, with many hyaline fenestral spots irregularly distributed in apical and posterior parts, more prominent at anal angle; densely punctate and pubescent in basal and costal parts. Wing hyaline. Legs brown, black on dorsal surface of femur and claws.

Abdominal segments black, the posterior margin of segments brown. Male genitalia as Plate II, 2—3; the parameres transparent, lanceolate; aedeagus slender, s-sinuate at tip. Ovipositor of female as Plate II, 4, three pairs of valvulae broad, the first and second pairs more acute, the third pair blunt.

Length from front of head to tips of tegmina 5.8—6.0 mm; width between tips of humeral angles 1.8 mm; height from base of prosternum to tip of anterior horn of pronotum 3.5—4 mm.

Types: Holotype 1 ♂, Allotype 1 ♀ & Paratype ♀ ♂ 162 specimens from Mount Taipei, Shensi Province, September 1937. (In author's collections and collections of the Pedagogic Research Group of Entomology of the Northwestern College of Agriculture.)

Host: *Quercus* sp.

CHARACTERS OF LAST-INSTAR NYMPH: Head black, broader than high. Eyes brown; somewhat protruding. Pronotum black, with yellowish-brown margin; metopium triangular, carina yellowish-brown; anterior horn not prominent; posterior process short, only reaching to posterior margin of metathorax, with black, large and rounded subapical node, tip triangular and black. Meso- and metathorax and wing-buds black, with yellowish-brown margin. Legs brown. Abdominal segments black, with brown posterior and lateral margins. The seventh and eighth abdominal segments each with a pair of long cerciform pilose yellowish-brown processes, extending to the lateral sides of the body, acute terminally. Length 3.5—4 mm.

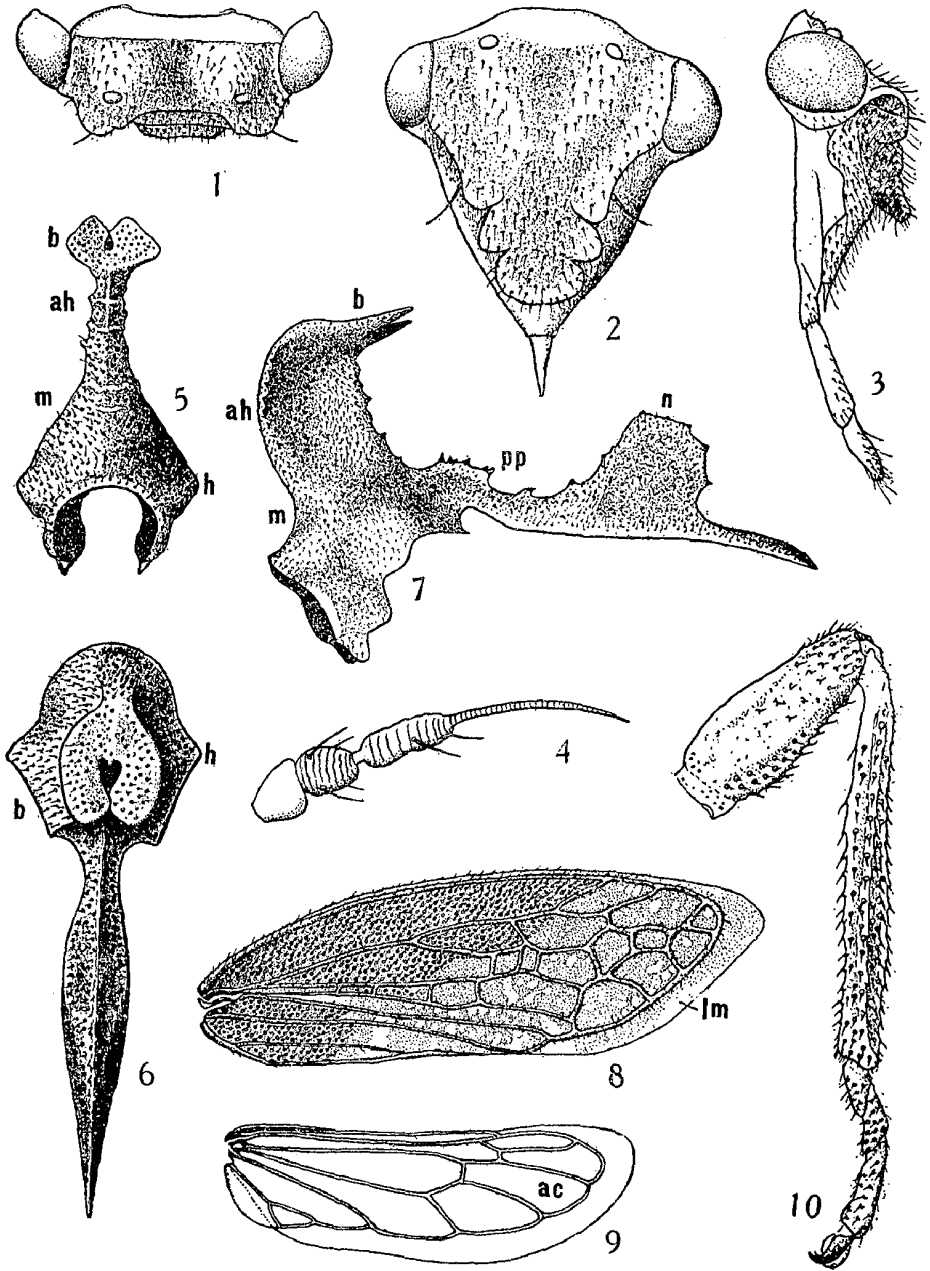
266 specimens collected on the same date and in the same locality.

CHARACTERS OF PENULTIMATE INSTAR: Form and coloration as the last-instar nymph, but the wing-buds and posterior process very short, no subapical node. Length about 2 mm.

18 specimens collected on the same date and in the same locality.

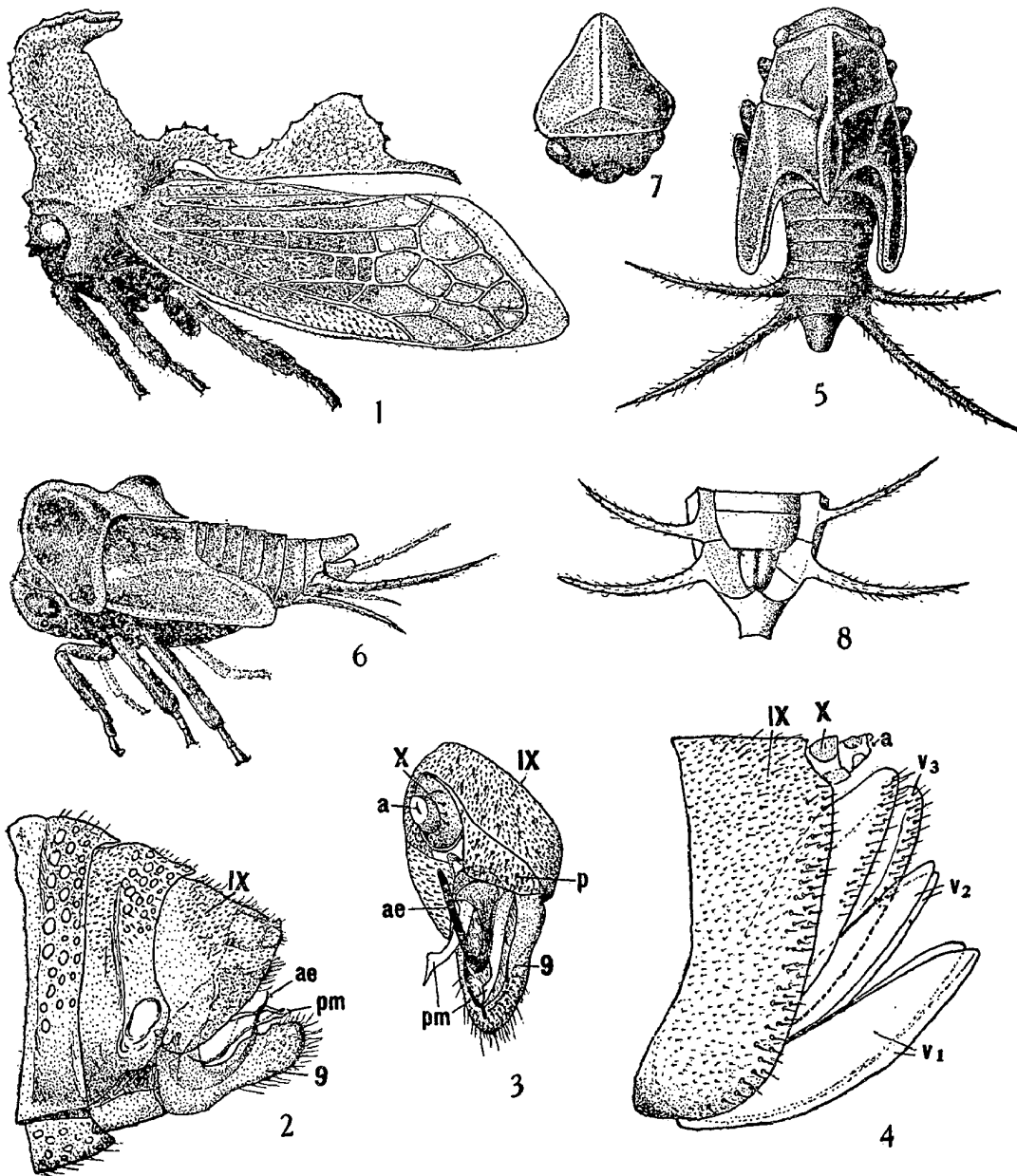
CHARACTERS OF SECOND-INSTAR: Form and coloration as last-instar nymph, but the wing-buds and posterior process barely visible. Length about 1.5 mm.

4 specimens collected on the same date and in the same locality.



1. 头的正面观。
2. 头的腹面观。
3. 头的侧面观。(以上三图按同一比例放大)
4. 触角。(更放大)
5. 前胸背板前面观。
6. 前胸背板背面观。
7. 前胸背板侧面观。(以上三图按同一比例放大)

m 前胸斜面, ah 前角, b 端瓣, pp 后突起, n 亚端结, h 肩角。
8. 前翅。
lm 端边域。
9. 后翅。
ac 端室。
10. 后足腿节以下部分。



1. 成虫全形侧面观。

2. 雄性腹部末端侧面观。

3. 雄性腹部末端后面观，微微偏侧。

IX, X 第九、十节背板，9 第九节腹板（下生殖板），p 侧板，pm 阳基侧突，ae 阴茎；a 肛门。

4. 雌性腹部末端侧面观。

v₁, v₂, v₃ 第一、二、三对产卵瓣，余注同雄性。

5. 末龄若虫全形背面观。

6. 末龄若虫全体侧面观。

7. 末龄若虫头及前胸背板（前胸斜面）前面观。

8. 末龄若虫腹部末端腹面观。